X. *An Account of ſome* Electrical Experiments *made at his* ROYAL HIGHNESS *the* PRINCE *of* WALES's *Houſe at* Cliefden, *on* Tueſday *the 15th of* April 1738. *where the* Electricity *was conveyed* 420 *Feet in a direct Line. By the Same.*

HAVING heard that Electricity had been carried along an hempen String five or ſix hundred Foot long, but having only ſeen it when the String was carried backwards and forwards in a Room by Silk *Supporters*, I was willing to try it with a Packthread String ſtretch'd out at full Length; for which Purpoſe having join'd a Cat-gut String of ſix Foot long, I faſten'd it to the Inſide of a Door in the Suite of Rooms at *Cliefden*; and having alſo tied another Cat-gut, like the firſt, to the other End of the String, I tied it up to the Inſide of the Door at the other End of the Houſe; but at the Place where the Packthread was join'd to the Cat-gut, I left a Foot and an half of Packthread hanging down, and faſten'd to it a *Lignum Vitæ* Handle of a Burning-Glaſs. Then applying a rubb'd Tube at the other End of the String, I made the Electricity run to the *Lignum Vitæ*, but with ſome Difficulty, which I attributed to the Size, being an animal Subſtance that ſtill ſtuck to the Packthread as it was new; therefore I caus'd the Packthread to be wet with a Sponge from one End to the other, to waſh off the Size: Then was the Electricity from the Tube communicated very ſoon and very ſtrongly; for the

Thread of Trial (mention'd in my former Papers) was drawn by the *Lignum Vitæ* at the Diſtance of a Foot.

Afterwards having join'd more Packthread together, I made a String of four hundred and twenty Foot long, one End of which I faſten'd (by the Interpoſition of Cat-gut as before) to the Iron Gates in the Garden, before the Houſe, and the End which had the *Lignum Vitæ* Handle, to the upper Part of the Door next to the Back-ſide of the Houſe in a large Drawing-Room, taking care that the String came through the middle of the open'd Doors through which it paſſed; and to prevent this String dragging upon the Ground, three Pieces of Cat-gut held acroſs by two Men, at equal Diſtances from the Ends, and from each other, ſupported it. The String was altogether dipp'd in a Pail of Water, before the Experiment; but great Care taken, that the Cat-gut ſhould not be wet.

Then I applied the rubb'd Tube at the End in the Garden, whilſt my Aſſiſtant held the Thread of Trial near the Handle above-mention'd, which Thread was ſtrongly attracted, though the Wind was very high, and blow'd in the contrary Direction to that in which the Electricity ran along.

I firſt tried the Experiment with the Packthread dry, but then it would not do at that Diſtance.

N. B. The Weather was moiſt when I made the Experiment.